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Daniel

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(54) **WRAP FOR BUNDLING OBJECTS**

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(63) Continuation of application No. 09/602,169, filed on Jun. 22, 2000, now abandoned, which is a continuation of application No. 09/080,703, filed on May 18, 1998, now Pat. No. 6,113,170, which is a continuation of application No. 08/671,490, filed on Jun. 27, 1996, now Pat. No. 5,853,212.

(51) **Int. Cl.**
A63C 11/02 (2006.01)

(52) **U.S. Cl.** ..... **294/147**; 294/141; 294/164; 24/16 R

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See application file for complete search history.

(56) **References Cited**

U.S. PATENT DOCUMENTS

2,061,817 A	*	11/1936	Van Cleef	132/246
2,118,875 A		5/1938	Windheim	224/5
2,530,695 A		11/1950	Helmert	224/5
2,542,601 A	*	2/1951	Van Cleef	132/246
3,257,054 A		6/1966	Miesel	224/56
3,426,393 A		2/1969	Mead	
3,543,353 A		12/1970	Meehan	
3,564,667 A	*	2/1971	Parrick et al.	280/814
3,757,429 A	*	9/1973	Sumino	34/103
3,768,711 A		10/1973	Wilkinson	224/45
3,947,927 A		4/1976	Rosenthal	24/81 SK
3,960,302 A		6/1976	Mazzoni	224/45 S
4,015,762 A		4/1977	Mendillo	224/45 S
4,120,437 A		10/1978	Hara	224/45
4,463,885 A		8/1984	Ball et al.	224/250
4,483,470 A		11/1984	Cousins	224/257
4,488,748 A		12/1984	Burkes	294/147
4,531,661 A		7/1985	Santy	224/191
4,540,006 A		9/1985	Collis	
4,641,454 A		2/1987	Ray et al.	

(Continued)

FOREIGN PATENT DOCUMENTS

WO	WO 96/00117	1/1996

OTHER PUBLICATIONS

Potts v. *Creager*, 155 U.S. 597; 15 S. Ct. 194; 39 L. Ed. 275; 1895 U.S. LEXIS 2109 (1895).

(Continued)

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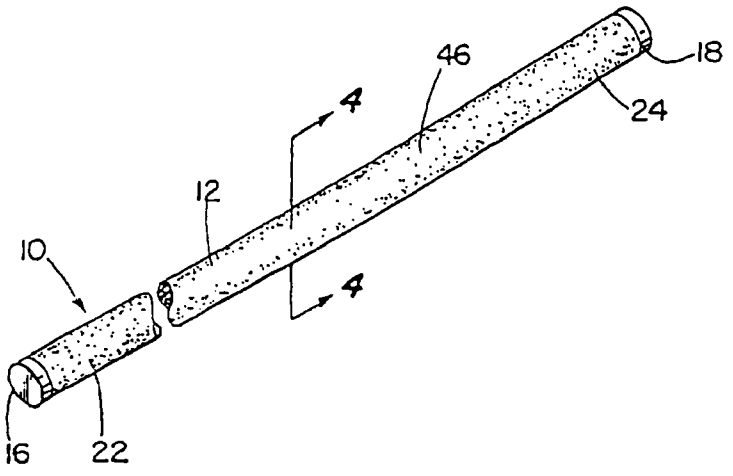
(57) **ABSTRACT**

The present invention is an apparatus and method for bundling and carrying snow ski equipment. The present invention is comprised of an elongate piece of first material having flexible qualities with a flexible strip of second, more rigid, and bendable material enclosed within the first material. The apparatus may be twist-tied around ski equipment for relatively easy transport.

23 Claims, 2 Drawing Sheets



U.S. PATENT DOCUMENTS

4,648,414	A *	3/1987	Fox et al.	132/246
4,666,417	A	5/1987	Hillman	446/267
4,817,837	A	4/1989	Grover	
4,834,118	A *	5/1989	Goeller	132/211
4,856,689	A	8/1989	Shore	224/218
4,915,996	A *	4/1990	Curry	428/40.9
D310,909	S	10/1990	Bradtl	D3/36
5,054,299	A	10/1991	Maveety	63/3
5,104,017	A	4/1992	Vandagriff	224/205
5,190,336	A	3/1993	Palz	294/147
5,234,370	A *	8/1993	Shapero et al.	446/394
5,437,401	A	8/1995	Seltzer	224/151
5,468,036	A	11/1995	Brown	294/147
5,498,190	A	3/1996	Ganson	
5,664,589	A *	9/1997	Black	132/246
5,714,211	A *	2/1998	Zinbarg et al.	428/16
5,769,994	A	6/1998	Booz et al.	
5,799,672	A *	9/1998	Hansbury	132/273
5,916,006	A	6/1999	Ganson	

OTHER PUBLICATIONS

Topliff v. *Topliff and Another*, 145 U.S. 156; 12 S. Ct. 825; 36 L. Ed. 658; 1892 U.S. LEXIS 2128 (1892).

Hobbs v. *Beach*, 180 U.S. 383; 21 S. Ct. 409; 45 L. Ed 586; 1901 U.S. LEXIS 1315 (1901).

Traitel Marble Co. v. *U.T. Hungerford Brass & Copper Co.*, 18 F. 2d 66; 1927 U.S. App. LEXIS 1877 (2d Cir. 1927).

H.C White Co. v. *Morton E. Converse & Son Co., et al.*, 20 F.2d 311; 1927 U.S. App. LEXIS 2518 (2d Cir. 1927).

In Re Hans Oetiker, 977 F.2d 1443; 1992 U.S. App. LEXIS 25784; 24 U.S.P.Q.2d (BNA) 1443; 93 Daily Journal DAR 658 (1992).

Amendment by Patent Owner in Ex Parte Reexamination filed Apr. 17, 2006 in Reexam No. 90/007,077, Reexam filed Jun. 15, 2004.

Declaration by Jeffrey S. Standley filed in support of Amendment by Patent Owner in Ex Parte Reexamination filed Apr. 17, 2006 in Reexam No. 90/007,077, Reexam filed Jun. 15, 2004.

Affidavit Under 37 CFR 1.132 of Dianne C. Daniel filed in support of Amendment by Patent Owner in Ex Parte Reexamination filed Apr. 17, 2006 in Reexam No. 90/007,077, Reexam filed Jun. 15, 2004.

Office Action Mailed Mar. 17, 2006 for U.S. Appl. No. 90/007,077.

Verified Complaint for Damages and Injunctive Relief Jury Demand Endorsed Hereon and Civil Cover Sheet, Nov. 25, 2003.

Motion for Temporary Restraining Order and Preliminary Injunction, Nov. 25, 2003.

Defendant Kwiktwist Corporation's Answer, Affirmative Defenses, and Counterclaims, Dec. 18, 2003.

Plaintiff Handle It Limited Liability Company's Reply and Affirmative Defenses to Defendant's Counterclaims, Jan. 5, 2004.

Response to Plaintiff's Motion for Temporary Restraining, Jan. 2, 2004.

Order Denying Motion for Temporary Restraining Order and Preliminary Injunction, Feb. 13, 2004.

Request for Reexamination of U.S. Patent No. 6,113,170.

Reexamination exhibit—photograph of "Hair Twirler" and "Toober" construction toy.

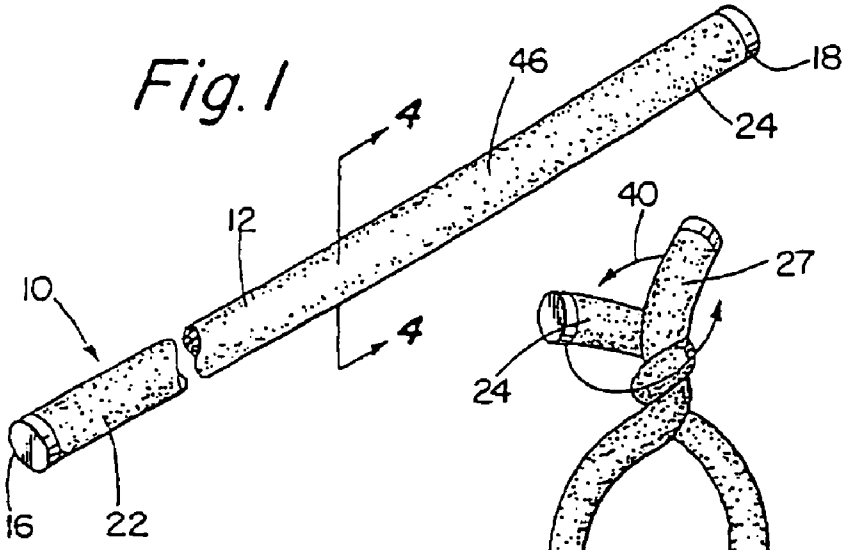
Zippy, Child's toy foam rubber product.

Kematic Industries & Co., Hair care foam rubber product.

Order Staying All Proceedings, United States District Court, Eastern District of Texas entered into the record on Aug. 17, 2004.

* cited by examiner

Fig. 1



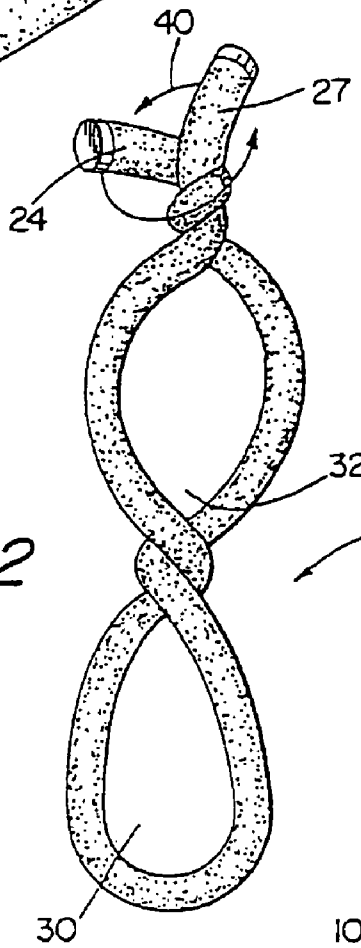


Fig. 2

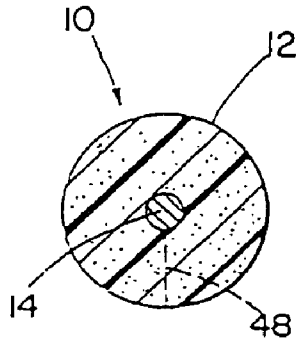


Fig. 4

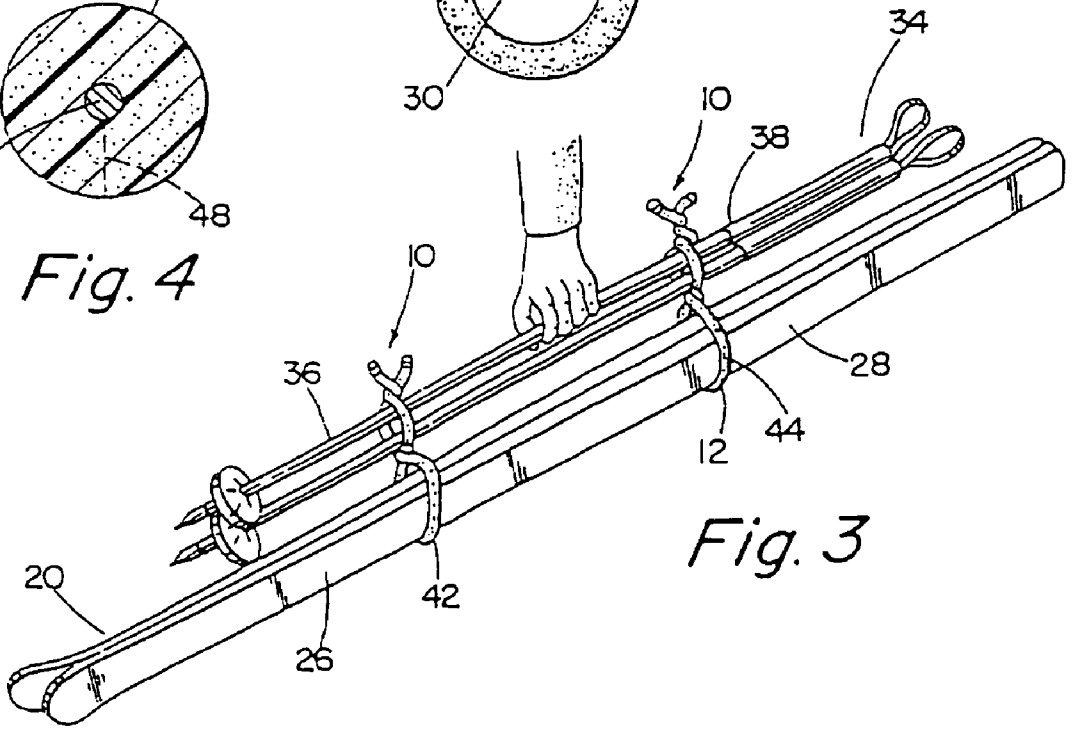


Fig. 3

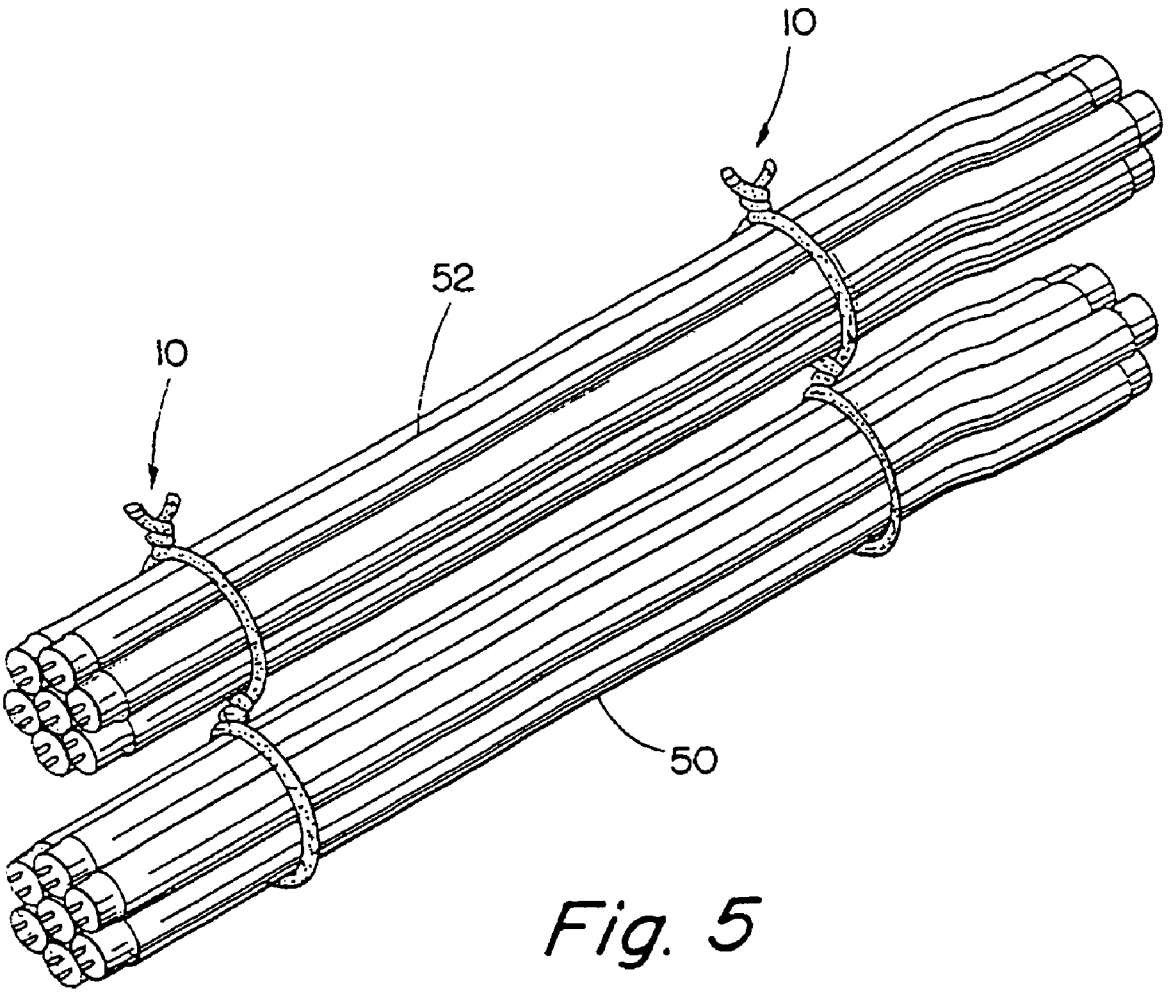


Fig. 5

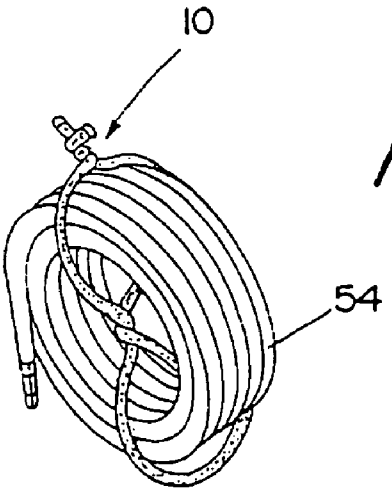


Fig. 6

WRAP FOR BUNDLING OBJECTS

This is a continuation of U.S. application No. 09/602,169, filed Jun. 22, 2000, now abandoned which is a continuation of U.S. application No. 09/080,703, filed May 18, 1998, now U.S. Pat. No. 6,113,170, which is a continuation of U.S. application No. 08/671,490, filed Jun. 27, 1996, now U.S. Pat. No. 5,853,212. The entirety of each of these references is hereby incorporated by reference.

BACKGROUND AND SUMMARY OF THE INVENTION

The present invention relates generally to equipment transportation devices and methods, and more particularly, to a snow ski wrap for easy transport of snow ski equipment.

The joys of snow skiing can often be shadowed by the difficulties of carrying and transporting the heavy and bulky skis and ski poles. Known ski equipment carrying devices such as those disclosed in U.S. Pat. Nos. 3,960,302, 4,888,748, 2,530,695, 3,257,054, 5,468,036, 2,118,875, 3,768,711, 4,120,437, 4,463,885, 4,015,762, 4,856,689, 5,190,336, 5,437,401, 4,531,661, and 3,947,927 require some sort of elaborate buckling, strapping, or Velcro-connecting means for carrying ski equipment. All these known devices are lacking because:

1) they require relatively time-consuming construction prior to use;
2) they cannot be easily used while wearing heavy snow gloves;
3) they are all relatively detailed in construction;
4) some fail to secure the ski equipment while also preventing scratch damage to the equipment; and
5) many known devices are not easily stored on the person while skiing.

The present invention is comprised of a tube-like, elongate piece of first material having characteristics including, but not limited to, soft, lightweight, and flexible qualities, such as found in sponge (or foam) rubber (any variation of first materials of the rubber-like variety would work well depending on the application and/or particular manufacturing technique). The tube-like, elongate piece of first material encloses a flexible strip of second material having characteristics including, but not limited to, flexible qualities that allow the strip to retain its new shape when bent, such as a flexible wire. In an exemplary embodiment, the tube-like, elongate piece of first material is a sponge (or foam) rubber piece which can be easily grabbed, or handled, while wearing heavy ski gloves. The flexible strip is bendable which allows the elongate rubber piece to retain its shape when bent. The elongate rubber piece is then twisted together to secure the snow skis. A second ski wrap may be similarly used to secure the opposite end of the snow skis. A pair of ski poles may then be placed in the spaces formed by the twisting of the ski wraps securing the snow skis. The ski wraps may again be twisted to secure the ski poles in place. The skier may then grab the ski poles and easily transport the ski equipment.

The rubber material preferably has a non-slip exterior surface which allows the ski equipment to be secured within the invention. Additionally, the rubber wrap does not scratch the expensive ski equipment while in contact with the equipment. The rubber wrap also slightly elevates the ski equipment from the ground which prevents damage to the ski equipment by abrasive asphalt or gravel.

The efficient design of the snow ski wrap allows for relatively easy manufacture. The design of the present invention also allows for easy maintenance and storage of the ski wrap when not in use. When not in use, the present invention may be stored in a user's pocket while skiing.

The present invention provides a much-needed apparatus and method of easily securing and carrying ski equipment as well as other apparatus. In addition to the features mentioned above, objects and advantages of the present invention will be readily apparent upon a reading of the following description.

BRIEF DESCRIPTION OF THE DRAWINGS

Novel features and advantages of the present invention, in addition to those mentioned above, will become apparent to those skilled in the art, from a reading of the following detailed description in conjunction with the accompanying drawings wherein similar reference characters refer to similar parts and in which:

FIG. **1** is a perspective view of an exemplary embodiment of the apparatus of the present invention;

FIG. **2** is a plan view of the apparatus of FIG. **1** in a twisted shape;

FIG. **3** is a perspective view of the apparatus of FIG. **1** in use;

FIG. **4** is a cross sectional taken along lines **4**—**4** in FIG. **1**;

FIG. **5** is a perspective view of an exemplary embodiment of the present invention in use as a bundling apparatus; and

FIG. **6** is a perspective view of an exemplary embodiment of the present invention in use as a garden hose restraint and carrying means.

DETAILED DESCRIPTION OF THE EXEMPLARY EMBODIMENTS

An exemplary system herein described is not intended to be exhaustive or to limit the invention to the precise forms disclosed. They are chosen and described to explain the principles of the invention, and the application of the method to practical uses, so that others skilled in the art may practice the invention.

The present invention is comprised of a tube-like, elongate piece of first material **12** having characteristics including, but not limited to, soft, lightweight, and flexible qualities, such as found in sponge (or foam) rubber (any variation of first materials of the rubber-like variety would work well depending on the application and/or particular manufacturing technique). The tube-like, elongate piece **12** of first material encloses a flexible strip **14** of second material having characteristics including, but not limited to, flexible qualities that allow the strip **14** to retain its new shape when bent, such as a flexible wire. In an exemplary embodiment, the tube-like, elongate piece **12** of first material is a sponge (or foam) rubber piece **12**, and the flexible strip **14** of second material is a strip **14** of flexible metal.

Referring in more detail to the drawings, and particularly FIG. **1**, an exemplary embodiment of the snow ski wrap **10** of the present invention is comprised of a tube-like, elongate piece of sponge, or foam, rubber **12**, a strip **14** of flexible metal enclosed within the length of the elongate piece of foam rubber **12**, and a first end cap **16** placed over the first end **22** of the elongate piece of foam rubber **12**, and a second end cap **18** placed over the opposite end **24** of the elongate piece of foam rubber **12**.

It may be preferred that the elongate piece of foam rubber **12** be formed of a long tube-like form, preferably between 10 to 50 inches long, as illustrated in FIG. **1**. It may also be

preferred that the elongate piece of foam rubber **12** have a diameter between 0.5 inch to 2.5 inches so that the snow ski wrap **10** is capable of being easily grabbed and manipulated while a user is wearing heavy ski gloves. Several well known manufacturing methods may be used to produce the present invention. An exemplary method is to co-extrude the rubber piece **12** onto the flexible strip **14**.

The flexible strip **14** of metal can be easily bent, yet the strip **14** has a degree of rigidity which allows the snow ski wrap **10** to retain its form when bent or straightened. In an exemplary embodiment, the strip **14** is a solid, 14 gauge, wire. FIG. **4** illustrates a cross-section of one end of the ski wrap **10**, showing the enclosed strip **14** of wire.

The ski wrap **10** may be used by straightening the foam rubber piece **12** as illustrated in FIG. **1**. Next the skier may place the two skis **20** together, as illustrated in FIG. **3**. The skier may then take the ski wrap **10** of the present invention and grab the ends **22**, **24** of the foam rubber piece **12** and wrap the elongate piece of foam rubber **12** around the first ends **26** and the two skis **20**. The skier/user may then "twist-tie" the foam rubber piece **12** around the first ends **26** of the two skis. Twist-tying refers to interlocking the foam rubber piece **12** by twisting the ends **22**, **24** of the foam rubber piece **12** together in the direction of the arrows **40** in FIG. **2**. (The ends **22**, **24** can also be twisted in the opposite direction of the arrows **40**).

The skier/user may then wrap and twist-tie a second ski wrap **10** around the second ends **28** of the skis **20**. The twist-tying motion creates a loop or hole **30** in which the skis **20** are secured. This twist-tying motion may also create a space **32** in which the ski poles **34** can be placed. The skier/user may then place a pair of ski poles **34** in the space **32** formed by the twist-tying of the elongate pieces of foam rubber **12**. The ski poles **34** may be secured in place by wrapping and twist-tying the elongate pieces of foam rubber **12** a second time around the ends **36**, **38** of the pair of ski poles **34**.

The skier/suer may carry the ski equipment by grasping the ski poles **34** between the first and second elongate pieces of foam rubber (**42**, **44** respectively).

The present invention is also unique as the elongate piece of foam rubber **12** has a non-slip exterior **46** in contact wit the skis **20** and ski poles **34**. The non-slip exterior **46** firmly secures the ski equipment in place to prevent the equipment from falling out of the loops **30**. The foam rubber also protects the ski equipment from being scratched by the carrying means. Other known ski carrying equipment utilize straps made of leather, or other material, which can scratch the surface of the ski equipment. In the present invention, the insulation provided by the foam rubber protects the finished surfaces of the ski equipment from damage while in transit. Not only does the present invention prevent scratching from the ski carrier, the snow ski wrap **10** may be used to keep the snow skis **20** off the abrasive ground or pavement. A snow ski wrap **10** is preferably made with a foam rubber piece **12** with a radius **48** large enough to elevate the skis **20** off the hard ground.

The present invention has other beneficial uses. More particularly, the present invention is capable of being used for bundling and carrying elongate articles. For example, the present invention **10** is capable of separately bundling rods, baseball bats, sticks of wood, garden hoses or practically any other elongate article.

As illustrated, the present invention **10** may be used to bundle articles in separate groups. For example, as illustrated by FIG. **5**, the first loop may be used to bundle and carry rods of one type **50** while the second loop may be used to bundle and carry rods of a second type **52**. The present invention **10** is unique as it may be easily grabbed and manipulated while wearing heavy gloves. Additionally, the foam rubber exterior **46** preferably protects the bundled articles from being scratched by the carrying means. As discussed above, the foam rubber may also insulate the bundled elongate articles, such as the rods **50**, **52** illustrated in FIG. **5**, from damage when placed on the ground.

FIG. **6** illustrates the present invention in use as a garden hose **54** restraint and carrying means. The present invention may also be used to secure items in place. For example, the present invention may be used to secure a bicycle to a bike rack.

Having shown and described an exemplary embodiment of the invention, those skilled in the art will realize that many variations and modifications may be made to affect the described invention and still be within the scope of the claimed invention. Thus, many of the elements indicated above may be altered or replaced by different elements which will provide the same result and fall within the spirit of the claimed invention. It is the intention, therefore, to limit the invention only as indicated by the scope of the claims.

What is claimed is:

1. A method of securing at least first and second inanimate articles together, said method comprising the steps of:

providing a first flexible strip of material adapted to be bent;

providing a first elongate piece of soft, rubber-like, non-scratch, flexible material substantially enclosing said first flexible strip of material; and

twist-tying said first elongate piece of flexible material around said first inanimate article to secure said first inanimate article for transport or storage, said inanimate article independent of articles for personal grooming related to the human body and its adornments, said twist-tying step comprising:

wrapping said first elongate piece of flexible material around the first inanimate article; and

wrapping said first elongate piece of flexible material around the second inanimate article such that said second inanimate article is wrapped independently of said first inanimate article;

wherein said first inanimate article is secured to said second inanimate article for transport or storage;

wherein said first elongate piece of flexible material has a diameter between about 0.5 inch and about 2.5 inches; and

wherein said first elongate piece of flexible material is at least about 10 inches long.

2. The method of claim **1** wherein:

said first elongate piece of flexible material is comprised of a rubber-like material selected from the group consisting of foam rubber and sponge rubber; and

said first flexible strip of material is comprised of metal.

3. The method of claim **1** wherein said first flexible strip of material is about 14 gauge.

4. The method of claim **1** wherein said first flexible strip of material has a degree of rigidity which allows said first flexible strip of material to retain its form when bent or straightened.

5. The method of claim **1** further comprising the steps of:

providing a second flexible strip of material adapted to be bent;

substantially enclosing said second flexible strip of material with a second elongate piece of flexible material; and

wrapping said second elongate piece of flexible material around said at least one inanimate article a distance from said first elongate piece of flexible material.

6. A method of securing a first piece of equipment to a second piece of equipment, said method comprising the steps of:

providing an apparatus comprising:

a flexible strip of material adapted to be bent; and

an elongate piece of rubber-like material substantially enclosing said flexible strip of material, said elongate piece of rubber-like material having a length of at least about 10 inches and a diameter between about 0.5 inch and about 2.5 inches;

wrapping said apparatus around said first piece of equipment; and

wrapping said apparatus around said second piece of equipment such that said second piece of equipment is wrapped independently of said first piece of equipment;

wherein said first piece of equipment is secured to said second piece of equipment; and

wherein at least one of said wrapping steps comprises twist-tying said apparatus around said respective piece of equipment.

7. The method of claim **6** wherein said flexible strip of material is adapted to retain a shape when bent.

8. The method of claim **6** wherein said flexible strip of material is 14 gauge wire.

9. The method of claim **6** wherein said elongate piece of rubber-like material is selected from the group consisting of foam rubber and sponge rubber.

10. The method of claim **6** wherein said apparatus further comprises:

a first end cap placed on an end of said elongate piece of rubber-like material; and

a second end cap placed on an opposite end of said elongate piece of rubber-like material.

11. The method of claim **6** wherein at least one of said first piece of equipment and said second piece of equipment is bundled with at least one other piece of equipment by said apparatus.

12. A method of securing at least first and second pieces of equipment together, said method comprising the steps of:

providing an apparatus comprising:

a flexible strip of material adapted to be bent; and

an elongate piece of flexible foam material substantially enclosing said flexible strip of material; and

twist-tying said apparatus around said first piece of equipment to secure said first piece of equipment, said twist-tying step comprising:

wrapping said apparatus around the first piece of equipment; and

wrapping said apparatus around the second piece of equipment such that said second piece of equipment is wrapped independently of said first piece of equipment;

wherein at least one of said wrapping steps comprises twist-tying said apparatus around said respective piece of equipment; and

wherein said first piece of equipment is secured to said second piece of equipment.

13. The method of claim **12** wherein said flexible strip of material is adapted to retain a shape when bent.

14. The method of claim **12** wherein said flexible strip of material is 14 gauge wire.

15. The method of claim **12** wherein said elongate piece of flexible foam material has a length of at least about 10 inches.

16. The method of claim **15** wherein said elongate piece of flexible foam material has a diameter between about 0.5 inch and about 2.5 inches.

17. The method of claim **12** wherein said elongate piece of flexible foam material is rubber-like.

18. The method of claim **17** wherein said elongate piece of flexible foam material is selected from the group consisting of foam rubber and sponge rubber.

19. The method of claim **12** wherein said elongate piece of flexible foam material is a circular tube.

20. The method of claim **12** wherein said apparatus further comprises:

a first end cap placed on an end of said elongate piece of flexible foam material; and

a second end cap placed on an opposite end of said elongate piece of flexible foam material.

21. The method of claim **12** wherein:

said flexible strip of material is adapted to retain a shape when bent;

said elongate piece of flexible foam material has a length of at least about 10 inches and a diameter between about 0.5 inch and about 2.5 inches;

said elongate piece of flexible foam material is selected from the group consisting of foam rubber and sponge rubber; and

said apparatus further comprises:

(a) a first end cap placed on an end of said elongate piece of flexible foam material; and

(b) a second end cap placed on an opposite end of said elongate piece of flexible foam material.

22. The method of claim **21** wherein each of said at least one piece of equipment is an inanimate article that is independent of articles for personal grooming related to the human body and its adornments.

23. The method of claim **12** wherein each of said at least one piece of equipment is an inanimate article that is independent of articles for personal grooming related to the human body and its adornments.

* * * * *